1. An endovascular tissue removal device comprising:

a lumen including a distal steerable tip portion extending from a joint portion;

registration means for holding the joint portion fixed in place in the vasculature; and

a source of ablation energy in communication with the lumen whereby tissue can be resected by ablation energy as the tip portion is steered within the vasculature.

2. The device of claim 1 in which the registration means includes an inflatable balloon about the joint portion.

3. The device of claim 1 in which the source of ablation energy is a laser.

4. The device of claim 3 in which the distal steerable tip portion includes a deflectable tip catheter.

5. The device of claim 4 in which there is an optical fiber inside the deflectable tip catheter and connected to the laser.

6. The device of claim 1 further including an expandable barrier for trapping any debris resected.

7. The device of claim 1 further including an expandable mechanism inflatable on the ventricular side of the valve for supporting the leaflets of the valve.

8. The device of claim 7 further including an absorptive surface on the expandable mechanism for absorbing ablation energy.

9. The device of claim 7 in which the expandable mechanism is a ballon.

10. An endovascular tissue removal device comprising:

a lumen including a distal steerable tip portion extending from a joint portion;

an inflatable balloon about the joint portion for registering the joint portion fixed in place in vasculature; and

a source of ablation energy in communication with the lumen whereby tissue can be resected by ablation energy as the tip portion is steered within the vasculature.

11. An endovascular tissue removal device comprising:

a lumen including a distal steerable tip portion extending from a joint portion;

registration means for holding the joint portion fixed in place in vasculature; and

an optical fiber within the lumen and steerable by the distal steerable tip portion and connected to a source of ablation energy to resect tissue as the tip portion is steered within the vasculature.

12. An endovascular tissue removal device comprising:

a lumen including a deflectable tip catheter;

registration means for holding the catheter fixed in place in vasculature; and

a source of ablation energy in communication with the lumen to resect tissue by ablation energy as the deflectable tip is steered within the vasculature.

13. An endovascular heart removal device comprising:

a catheter including a deflectable tip;

a laser source;

an optical fiber within the catheter connected to the laser source; and

an inflatable balloon for registering the deflectable tip in vasculature to resect a heart valve with laser energy as the deflectable tip portion is used to steer the distal end of the optical fiber within vasculature.

14. The device of claim 13 further including an expandable barrier for trapping debris during resection.

15. An endovascular heart removal device comprising:

a catheter including a deflectable tip;

a laser source;

an optical fiber within the catheter connected to the laser source;

a first inflatable balloon for registering the deflectable tip in vasculature to resect a heart valve with laser energy as the deflectable tip portion is used to steer the distal end of the optical fiber within vasculature; and

a second balloon inflatable on the ventricular side of the valve for supporting the leaflets of the valve.

16. A method of resecting a valve, the method comprising:

endovascularly introducing a lumen with a distal steerable tip portion to a position proximate a valve to be resected;

registering the lumen in place in the vasculature;

directing ablation energy through the lumen; and

steering the distal steerable tip portion to resect the valve.

17. The method of claim 16 further including the step of endovascularly introducing an expandable mechanism on the ventricular side of the valve and inflating the expandable mechanism to support the leaflets of the valve during resection.

18. A method of resecting a valve, the method comprising:

endovascularly introducing a lumen with a distal steerable tip portion to a position proximate a valve to be resected;

registering the lumen in place in the vasculature;

endovascularly introducing an expandable mechanism on the ventricular side of the valve and inflating the expandable mechanism to support the leaflets of the valve during resection;

directing ablation energy through the lumen; and

steering the distal steerable tip portion to resect the valve.